



Date: 6/11/19

Subject: Andrews Chapel Lift Station Service Area Analysis

Summary

The Department of Public Works (DPW) proposes to establish the Andrews Chapel Lift Station Service Area to reimburse M/I Homes of Raleigh, LLC for the construction of a regional lift station that will serve a 439 acre sewer basin in southeast Durham. Per Chapter 162A Article 8 of the NC General Statutes, "A local governmental unit may adopt a system development fee for water or sewer service only in accordance with the conditions and limitations of this Article." According to this article, "A system development fee shall be calculated based on a written analysis, which may constitute or be included in a capital improvements plan." Further, "For not less than 45 days prior to considering the adoption of a system development fee analysis, the local governmental unit shall post the analysis on its Web site and solicit and furnish a means to submit written comments, which shall be considered by the preparer of the analysis for possible modifications or revisions."

In accordance the Chapter 162A Article, the following supporting analysis documents the calculation of the system development fee. Any questions or comments should be submitted to Brian Sessoms at the email listed below.

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Andrews Chapel Lift Station Service Area Analysis

Assumptions

1. The service area is based on the basin evaluation “Andrews Chapel Chapel Sewer Basin – Buildout Condition” performed by McAdams Company and Highfill Infrastructure Engineering, P.C. for the approval and permitting of the Andrews Chapel Lift Station.
2. The number of future developable lots is based on the “Andrews Chapel Chapel Sewer Basin – Buildout Condition” performed by McAdams Company and Highfill Infrastructure Engineering, P.C. for the approval and permitting of the Andrews Chapel Lift Station.
3. The construction costs are based on the approved “Andrews Chapel Lift Station Basis of Design” and “Opinion of Probable Construction Cost – Sewer Reimbursement” performed by McAdams Company and Highfill Infrastructure Engineering, P.C. for the approval and permitting of the Andrews Chapel Lift Station.
4. The City of Durham charges five percent of the proposed fee from Future Benefited Developments to administer the reimbursement to M/I Homes of Raleigh, LLC for the construction of the Andrews Chapel Lift station.
5. Permitted wastewater flows are defined by the sewer design flow rates in North Carolina Administrative Code Section 15A NCAC 02H .0200 – Waste Not Discharged to Surface Waters
6. The non-residential development will pay a fee based on a 360 gallon per day of permitted waste water equivalency.
7. The service area fee will be collected for a period of 15 years.

Data

1. Andrews Chapel Lift Station Estimated Construction Cost
 - a. \$2,250,401.00
2. Estimated Residential Units in Andrews Chapel Lift Station Service Area
 - a. 1681
3. Fee per Single Family Residential Unit
 - a. \$1,339.00
4. City of Durham Administrative Fee per Single Family Residential Unit (5%)
 - a. \$67.00
5. Total Single Family Residential Unit Service Area Fee
 - a. \$1,406.00
6. Fee per Gallon Per Day of Non-Single Family Permitted Wastewater
 - a. \$3.72
7. City of Durham Administrative Fee Non-Single Family (5%)
 - a. \$0.19
8. Total Gallon Per Day of Non-Single Family Permitted Wastewater Service Area Fee
 - a. \$3.91

Methodology

1. The single family residential service area fee was calculated by dividing the estimated construction cost by the total number of estimated residential units served in the Andrews Chapel Lift Station Service Area.
2. The City of Durham’s administrative fee is then added to the per unit fee to determine the total service area fee.

3. The non-residential gallon per day of permitted wastewater fee was calculated as an equivalency of 360 gallons per day to the Single Family Residential Fee.
4. The City of Durham's administrative fee is then added to the gallon per day fee to determine the total service area fee.